### Octrooiraad



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#### Nederland

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- 54 Sluitwerk voor een deksel van een reservoir.
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# **Patent Council**

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- 54 Locking mechanism for a container lid or cover
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The items attached hereto are a photocopy of the originally submitted description with claim(s) and possible drawing(s).

#### H AL/lh/29

# Locking mechanism for a container lid or cover

The invention involves a locking mechanism for a container lid or cover, including as a minimum a handle, bolting or latching devices and fastening accessories for fastening the handle and the bolting or latching devices onto the lid or cover.

In the past, for secured closure against wind and sudden movements, a turning handle secured to the lid or cover was used which, by its own weight and with the lid or cover in the closed position, hooks onto an edge of the container to lock it.

Due to the turning or swiveling nature of the handle, when opening and closing, one never has this lid or cover securely in hand. In addition, it is a disadvantage that for unlocking a lid or cover, a complicated and difficult hand movement has to be made.

The purpose of the invention is to provide a stable handle and an easy to use and safely secured lock.

The locking mechanism according to the invention includes for that purpose a handle that is stationary secured onto the lid or cover using the fastening accessories, that the bolting or latching devices are movably fixed onto the lid or cover using the fastening accessories, that the bolting or latching devices include an operating component, that can be manipulated at the same time with the handle with only one hand and that the locking mechanism includes springs that force the bolting or latching devices to their locking position.

More detailed features are explained and shown in the illustration. In the drawing,

- Fig. 1 shows a side view of a container with a lid or cover and a locking mechanism according to the invention,
- Fig. 2, on a larger scale, a cross-section along line II-II of Fig. 1;
- Fig. 3 in cross-section, a locking mechanism according to the invention that is equipped with a lock.
- Fig. 4 a side view of the lock bolt of the lock.

A container 1 and a lid or cover 2 are in a turning or swiveling way secured to each other. Between front edge 5 of lid or cover 2 and a front edge 6 of container 1, a rubber strip 10 is located. Locking mechanism 4 according to the invention is located at the front edge 5 of lid or cover 2 and it hooks itself under front edge 6 of container 1 (fig. 2). Locking mechanism 4 includes essentially a U-shaped handle 7 secured to lid or cover 2 using fastening accessories 8.

Fastening accessories 8 include two fastening pins 20, around which spacer bushings 11 and rings 12 are located which are each secured by means of a screwed end 19 and with a nut 9. Preferably, the bolting or latching devices are included between lid or cover 2 and rings 12 using eyes 14 and springs 18 forming rubber rings 13 around the spacer bushings 11. Locking means 15 are also in essence U shaped and consist of an operating component 16 and latches 17. Operating component 16 and handle 7 are shaped and positioned in such a way that they can be manipulated with one hand. They extend in parallel to each other, preferably horizontally. Legs 21 of the U-shaped locking mechanisms 15 extend upward at an angle, each from operating component 16 in the direction of container 1 up to under front edge 6 of container 1; then, they extend from container 1 upward to fastening accessories 8.

When closing container 1, lid or cover 2 at handle 7 is moved downward to the closed position of lid or cover 2 whereby latches 17 through their legs (2) extending upwards at an angle are pushed first to the side and then are forced to their locked position by rubber rings 13.

When opening container 1, handle 7 and operating component 16 of the bolting mechanism 8 are manipulated by one hand and after pushing lid or cover 2 somewhat downward, operating mechanism 16 is moved towards handle 7; as a result, latches 17 are removed from their locked position and by

moving the whole locking mechanism 4 upward container 1 is opened. Through rubber rings 13, latches 17 are kept in a stable and neutral position while lid or cover 2 is open.

Locking mechanism 4 can also be provided with a lock 25 (fig. 3) for keeping bolting or latching devices 15 in the locked position using a key 24. Lock 25 is secured with a nut 28 in a housing 26 that is secured to the container with screws 27. Lock bolt 30 of lock 25 is installed with a nut 29 through eye 31.

When the lid or cover is closed, where bolting or latching devices 15 are in the locked position, when turning key 24 to the locked position, lock bolt 30 hooks behind members 21 of bolting or latching devices 15 and protects as such container 1 against opening by unauthorized individuals without key 24.

#### CLAIMS

- 1. Locking mechanism (4) for a lid or cover (2) of a container (1), including as a minimum a handle (7), bolting or latching devices and fastening accessories for fastening handle (7) and bolting or latching devices (15) characterized by the fact that handle (7) is stationary secured to lid or cover (2) using fastening accessories (15), that bolting or latching devices (15) are secured to lid or cover (2) using fastening accessories (8) and can be moved, that bolting or latching devices (15) include an operating component (16), that it can be manipulated at the same time with handle (7) with only one hand and that locking mechanism (4) includes springs (18) that bring the bolting or latching devices to their locked position.
- Locking mechanism (4) according to claim 1, characterized by the fact that bolting or latching devices (15) and handle (7) can be secured to lid or cover (2) using joint fastening accessories (8).
- 3. Locking mechanism (4) according to claim 1 or 2 characterized by the fact that a spring activated ring (13) of springs (18) and an eye (14) of the bolting or latching devices (15) are integrated around a securing pin (20) of fastening accessories (8).
- 4. Locking mechanism (4) according to one of the prior claims, characterized by the fact that handle (7) is essentially U-shaped and can be secured with its two members (22) using fastening accessories (8) to the lid or cover, and that bolting or latching devices (15) also are essentially U-shaped, whereby operating component (16) is extended in parallel to and near handle (7) and whereby members (21) of U-shaped bolting or latching devices (15) each extend, starting from operating component (16) in the direction of container (1) at an angle upwards up to under a container edge (6), and then from container (1) upwards to fastening accessories (8).
- 5. Locking mechanism (4) according to one of claims 1-4, characterized by a lock (25) on container (1), of which lock bolt (30) hooks in the closed position behind members (21) of bolting or latching devices (15).

